AMENDMENTS TO THE CLAIMS

1. (Currently amended) A micro-lens array for use in an imager, comprising:

a semiconductor substrate positioned over an array of pixel cells, the semiconductor substrate having a bottom surface facing towards the pixel cells and an upper surface opposite the bottom surface;

an opening in the semiconductor substrate recessed ~~from~~ below the upper surface of the substrate, the opening serving as a mold for a plurality of micro-lenses; and

lens material located within the opening mold of the semiconductor substrate, wherein the lens material forms the plurality of micro-lenses, each of the micro-lenses having a respective focal point, wherein the focal point of at least one of the plurality of micro-lenses differs from the focal point of at least one other of the plurality of micro-lenses ~~said opening serving as a mold for the lens material~~.

2. (Currently amended) The micro-lens array of claim 1, wherein the opening has at least one arcuate portion.

3. (Currently amended) The micro-lens array of claim 1, wherein the opening mold is shaped such that ~~said~~ the lens material corrects for optical aberrations.

4. (Currently amended) The micro-lens array of claim 1, wherein the semiconductor substrate comprises silicon dioxide.

5. (Currently amended) The micro-lens array of claim 4, wherein the differing focal points of the plurality of micro-lenses focus light to different depths in the semiconductor substrate

~~wherein the opening is shaped such that said lens material accounts for color dependent photon absorption differences of a photosensor of said pixel cell~~.

6. (Currently amended) The micro-lens array of claim 1, wherein the lens material exhibits a refractive index greater than that of the semiconductor substrate.

7. (Currently amended) The micro-lens array of claim 1, wherein the lens material exhibits a refractive index less than the semiconductor substrate.

8. (Currently amended) A micro-lens array, comprising:

a semiconductor substrate positioned over an array of pixel cells, the substrate having a bottom surface facing towards the pixel cells and an upper surface opposite the bottom surface, and the substrate being formed of silicon dioxide;

an opening in the substrate recessed ~~from~~ below the upper surface of the semiconductor substrate, the opening serving as a mold for a plurality of micro-lenses ~~said substrate being formed of silicon dioxide~~; and

lens material located within the opening of the semiconductor substrate, wherein the opening mold is shaped such that ~~said~~ the lens material corrects for optical aberrations, and wherein the lens material forms the plurality of micro-lenses, each of the micro-lenses having a respective focal point, wherein the focal point of at least one of the plurality of micro-lenses differs from the focal point of at least one other of the plurality of micro-lenses.

9. (Currently amended) The micro-lens array of claim 8, wherein the opening mold is structured such that [[a]] the focal point of ~~the~~ each micro-lens of the array is associated with a color of light.

10. (Currently amended) The micro-lens array of claim 8, wherein the lens material exhibits a refractive index greater than that of the semiconductor substrate.

11. (Currently amended) The micro-lens array of claim 8, wherein the lens material exhibits a refractive index less than that of the semiconductor substrate.

Claims 12-48. (Canceled)

49. (New) The micro-lens array of claim 1, further comprising a plurality of openings in the semiconductor substrate forming a plurality of molds, wherein each opening mold contains lens material that forms a respective plurality of micro-lenses, each of the micro-lenses having a respective focal point, wherein the focal point of at least one of the plurality of micro-lenses differs from the focal point of at least one other of the plurality of micro-lenses in the same opening.

50. (New) The micro-lens array of claim 1, wherein the focal point of at least one of the plurality of micro-lenses differs from the focal point of at least one other of the plurality of micro-lenses such that the focal points of the plurality of micro-lenses change gradually across the micro-lens array.

51. (New) The micro-lens array of claim 1, wherein each micro-lens is respectively associated with a photosensor of one of the array of pixel cells.

52. (New) The micro-lens array of claim 1, wherein at least one of the plurality of micro-lenses has a different shape than another one of the plurality of micro-lenses.

53. (New) The micro-lens array of claim 1, wherein at least one of the plurality of micro-lenses has a different size than another one of the plurality of micro-lenses.

54. (New) The micro-lens array of claim 1, wherein at least one of the plurality of micro-lenses has a different profile than another one of the plurality of micro-lenses.

53. (New) The micro-lens array of claim 8, further comprising a plurality of openings in the semiconductor substrate forming a plurality of molds, wherein each opening mold contains lens material that forms a respective plurality of micro-lenses, each of the micro-lenses having a respective focal point, wherein the focal point of at least one of the plurality of micro-lenses differs from the focal point of at least one other of the plurality of micro-lenses in the same opening.

54. (New) The micro-lens array of claim 8, wherein the focal point of at least one of the plurality of micro-lenses differs from the focal point of at least one other of the plurality of micro-lenses such that the focal points of the plurality of micro-lenses change gradually across the micro-lens array.

55. (New) The micro-lens array of claim 8, wherein each micro-lens is respectively associated with a photosensor of one of the array of pixel cells.